

# REGIONAL EDUCATIONAL LABORATORY

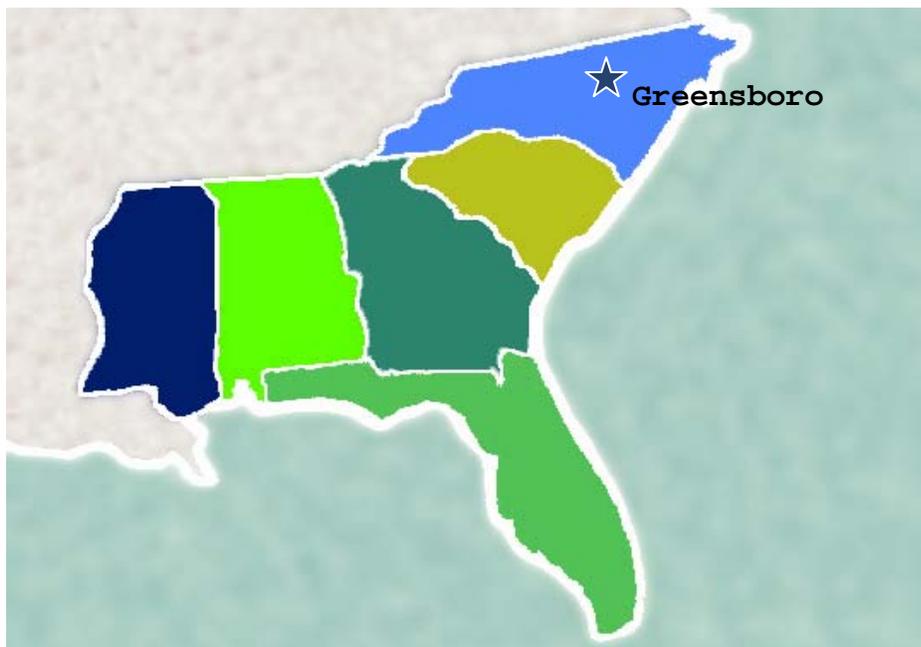
## SOUTHEAST ~ SERVECenter

April 2010, EBE # 591B

### EVIDENCE BASED EDUCATION REQUEST DESK

#### OUR GOAL

To assist educators and policymakers in their efforts to apply the evidence base to decisions about policies, programs, and practices they encounter.



#### REQUEST:

- Provide a bibliography of the seminal pieces of research related to ARRA Assurance #2 - Longitudinal Data Systems
  - *Goal 2: Establishing pre-K to college and career data systems that track progress and foster continuous improvement.*

#### RESPONSE

Longitudinal Data Systems (LDS) house student data spanning multiple years and schools. The No Child Left Behind (NCLB) Act of 2001 codifies LDS, “Each State educational agency may incorporate the data from the assessments under this paragraph into a State-developed longitudinal data system that links student test scores, length of enrollment, and graduation records over time” (20 USCS § 6311.) As such, many parents, teachers, administrators, researchers, and policy makers seek information regarding the need for LDS, factors to consider when implementing LDS, and how to utilize LDS.

If you have any questions regarding this document, please contact the REL-SE, 1-800-755-3277 or RELSoutheast@serve.org

## **The Data Quality Campaign (DQC)**

First and foremost among LDS information resources is the Data Quality Campaign (DQC). The DQC is a nationwide consortium assembled to support states, districts, and schools as they design and implement data systems to improve student outcomes. Unique among educational organizations for both its purpose—promoting data systems usage—and its composition, the DQC was established in 2005 by 10 founding organizations. The DQC now includes 14 managing partners [listed here:

<http://www.dataqualitycampaign.org/about/partners/managing>] and endorsing partners, [listed here: <http://www.dataqualitycampaign.org/about/partners/endorsing>].

The DQC offers myriad resources, including an annual State Education Agency (SEA) survey used to gauge SEA progress towards implementing and using longitudinal data to improve student outcomes. Annual survey results may be viewed here:

<http://www.dataqualitycampaign.org/survey>. Ten Essential Elements [available here: <http://www.dataqualitycampaign.org/survey/elements>] and, new in 2009, Ten State Actions [available here: <http://www.dataqualitycampaign.org/survey/actions>] comprise the survey items.

The DQC also maintains a resource library that includes Articles, Meeting Materials, Memoranda of Understanding (MOU), Newsletters, Policy Briefs, Presentations, Press Releases, Research Reports, Tools, and Webinars. These resources are also available by intended audience: Policymakers, Data Managers, District Administrators, Teachers & Principals, & Postsecondary Leaders. Highlighted DQC resources are available below.

## **Bibliography**

The research and resources in the following tables have been divided into three categories:

1. *Necessity*. These resources help detail why LDS are needed (p.2).
2. *Implementing*. These reports discuss factors to consider and best practices to use when choosing and implementing an LDS (p.5).
3. *Utilizing*. These resources feature ways to better use and refine LDS (p.7).

## 1. Necessity

Bergner, T., & Smith, N. (2007). *How can my state benefit from an educational data warehouse?* Washington, DC: Data Quality Campaign. Retrieved February 3, 2010 from: [http://www.dataqualitycampaign.org/files/Publications-State\\_Benefits\\_from\\_Data\\_Warehouse-090107.pdf](http://www.dataqualitycampaign.org/files/Publications-State_Benefits_from_Data_Warehouse-090107.pdf)

Data Quality Campaign Summary:

“A policy brief describing data warehouses and outlining the benefits to states of building one.”

Berry, B., Fuller, E., Reeves, C., & Laird, E. (2007). *Linking teacher and student data to improve teacher and teaching quality.* Washington, DC: Data Quality Campaign. Retrieved January 22, 2010 from: [http://www.dataqualitycampaign.org/files/Meetings-DQC\\_Quarterly\\_Issue\\_Brief\\_031207.pdf](http://www.dataqualitycampaign.org/files/Meetings-DQC_Quarterly_Issue_Brief_031207.pdf)

Data Quality Campaign Summary:

“New policy questions and accountability demands require better data on teachers and the universities that prepare them, so additional investments are needed to gather, house and analyze data in new ways that inform policy and practice. This issue brief focuses on why it is important to establish statewide longitudinal data systems that include the ability to link teacher, school and student information. It also highlights lessons from states that are in the forefront of building and using these systems.”

Collins, L., Fruth, L., Sessa, M., & Laird, E. (2007). *The right data to the right people at the right time: How interoperable data help America's students succeed.* Washington, DC: Data Quality Campaign. Retrieved February 4, 2010 from: [http://www.dataqualitycampaign.org/files/Meetings-DQC\\_Quarterly\\_Issue\\_Brief\\_061307.pdf](http://www.dataqualitycampaign.org/files/Meetings-DQC_Quarterly_Issue_Brief_061307.pdf)

Data Quality Campaign Summary:

“Many education data systems are not able to share information due to incompatibilities in technology and lack of human capacity, which together inhibit the quantity and quality of longitudinal data. Fortunately, interoperable systems, defined as an environment in which diverse data systems seamlessly exchange information with little or no additional effort, are becoming more prevalent.”

Data Quality Campaign. (2008, November). *Measuring what Matters: Creating longitudinal data systems to improve student achievement.* Retrieved February 2, 2010 from: [http://www.dataqualitycampaign.org/files/DQC\\_measuring\\_what\\_matters08.pdf](http://www.dataqualitycampaign.org/files/DQC_measuring_what_matters08.pdf)

## 1. Necessity

Data Quality Campaign Summary:

“To build a robust longitudinal data system, states must include the 10 essential elements.”

Ewell, P., & Boeke, M. (2007). *Critical connections: Linking states' unit record systems to track student progress*. Indianapolis, IN: Lumina Foundation for Education. Retrieved February 2, 2010 from: <http://www.dataqualitycampaign.org/files/publications-criticalconnections-010107.pdf>

Data Quality Campaign Summary:

“National Center For Higher Education Management Systems 50 state survey of Student Unit Record data systems, with specific elements, common applications, challenges and recommendations.”

Laird, E., Guidera, A., Smith, N., & Dougherty, C. (2008). *The power of longitudinal data: A guide for school leaders*. Washington, DC: Data Quality Campaign. Retrieved January 22, 2010 from: <http://www.dataqualitycampaign.org/files/publications-tapping into the power of longitudinal data-a guide for school leaders-010108.pdf>

Data Quality Campaign Summary:

“This is part of a series of guides that demonstrate the power of longitudinal data for specific audiences. To ensure relevance to teachers and principals, the DQC worked with the National Association of Secondary School Principals (NASSP) to identify the most pressing questions facing school leaders today. This guide for school leaders answers these questions with graphs and explanations based on simulated grades created from actual snapshot and longitudinal data from Texas, as well as an example from a ‘breakthrough’ high school in New York.”

Learning Point Associates. (2009, August). *Connecting research to practice: Knowing who is proficient isn't always sufficient*. Retrieved January 12, 2010 from: [http://www.learningpt.org/pdfs/3833%20EEP\\_Knowing%20Who%20Is%20Proficient\\_FINAL1a.pdf](http://www.learningpt.org/pdfs/3833%20EEP_Knowing%20Who%20Is%20Proficient_FINAL1a.pdf)

Learning Point Associates Summary:

“Three components to help educators and policymakers understand the limitations of relying on a single measurement tool and the

## 1. Necessity

value of continually seeking out multiple perspectives on student performance data.”

L’Orange, H., & Ewell, P. (2007). *P-20 Data systems: An alignment status report*. Washington, DC: Data Quality Campaign. Retrieved February 3, 2010 from: [http://www.dataqualitycampaign.org/files/Meetings-DQC\\_Quarterly\\_Issue\\_Brief\\_061306.pdf](http://www.dataqualitycampaign.org/files/Meetings-DQC_Quarterly_Issue_Brief_061306.pdf)

Data Quality Campaign Summary:

“This issue brief was produced for the June 13, 2006 DQC Quarterly Issue Meeting focused on aligning P-12 and postsecondary data systems and explores the past, present, and future of aligning these two, at times, disparate data systems.”

McDonald, S., Andal, J., Brown, K., & Schneider, B. (2007). *Getting the evidence for evidence-based initiatives: How the Midwest states use data systems to improve education processes and outcomes* (Issues & Answers Report, REL 2007–No. 016). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved January 22, 2010 from: [http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL\\_2007016.pdf](http://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2007016.pdf)

Institute of Education Sciences Abstract:

“States in the Midwest Region are developing innovative approaches to collecting and providing access to high-quality data in order to improve educational decision making. Additional capacity-building and increased technical assistance at the state and local levels would enhance this work.”

Palaich, R.M., Good, D.G., & van der Ploeg, A. (2004). State education data systems that increase learning and improve accountability. *Policy Issues*, 16, 1–12. Chicago, IL: Learning Point Associates. Retrieved January 22, 2010 from: <http://www.ncrel.org/policy/pubs/pdfs/pivol16.pdf>

Learning Point Associates Summary:

“This issue examines the current condition of state education data systems by looking critically at the past, present, and future of education data use. It assesses the components needed for system improvements and provides policy recommendations to help states create efficient and useful data systems that commit to advancing accountability systems to improve student learning.”

## 1. Necessity

Smith, N. (2008). *Why is student-level P-20 data sharing important?: What New England can learn from the Data Quality Campaign*. Washington, DC: Data Quality Campaign. Retrieved February 4, 2010 from:  
[http://www.dataqualitycampaign.org/files/publications-why\\_student-level\\_p-20\\_data\\_sharing\\_important-030108.pdf](http://www.dataqualitycampaign.org/files/publications-why_student-level_p-20_data_sharing_important-030108.pdf)

Data Quality Campaign Summary:

“An overview of the challenges in establishing a state P20 data system as well as recommended actions for states.”

## 2. Implementing

Data Quality Campaign. (2007, April). *Building and using statewide longitudinal data systems: Implications for policy*. Retrieved February 2, 2010 from:  
[http://www.dataqualitycampaign.org/files/Publication-Building\\_and\\_Using\\_Statewide\\_Longitudinal\\_Data\\_Systems-Implications\\_for\\_Policy-040107.pdf](http://www.dataqualitycampaign.org/files/Publication-Building_and_Using_Statewide_Longitudinal_Data_Systems-Implications_for_Policy-040107.pdf)

Data Quality Campaign Summary:

“...The policy actions noted here reflect the common concerns, shared vision and lessons learned from the growing DQC network.”

Data Quality Campaign. (2006, November). *Creating a longitudinal data system: Using data to improve student achievement*. Retrieved January 22, 2010 from:  
[http://www.dataqualitycampaign.org/files/Publications-Creating\\_Longitudinal\\_Data\\_System.pdf](http://www.dataqualitycampaign.org/files/Publications-Creating_Longitudinal_Data_System.pdf)

Data Quality Campaign Summary:

“This quintessential white paper explains the ten essential elements and policy benefits of state longitudinal data.”

Dougherty, C. (2008). *Information won't be used if no one can see it: Why states should publish statistics based on longitudinal student data*. Retrieved February 3, 2010 from:  
[http://www.dataqualitycampaign.org/files/publication-information\\_wont\\_be\\_used\\_if\\_no\\_one\\_sees\\_it-090108.pdf](http://www.dataqualitycampaign.org/files/publication-information_wont_be_used_if_no_one_sees_it-090108.pdf)

Data Quality Campaign Summary:

“A brief on the types of reports and statistics that should be generated with longitudinal data to improve education.”

Laird, E. (2008). *Developing and supporting P-20 education data systems: Models that work*. Washington, DC: Data Quality Campaign. Retrieved January 22, 2010 from:  
[http://www.dataqualitycampaign.org/files/meetings-dqc\\_quarterly\\_issue\\_brief\\_011508.pdf](http://www.dataqualitycampaign.org/files/meetings-dqc_quarterly_issue_brief_011508.pdf)

Data Quality Campaign Summary:

“This brief highlights four states models for creating a connected data system that follows a student over his or her education.

## 2. Implementing

Currently, there is no ‘silver bullet’ model for states seeking to align P-20 data systems; however, these state case studies offer four distinct approaches that were developed based on the states unique political and technical environments. The commonality across these states is that they convened diverse stakeholders from P-12 and postsecondary systems to define what they are trying to accomplish and how aligning P-20 data systems will help achieve these goals.”

Laird, E., & Reyna, R. (2008). *Data governance: Changing culture, breaking down silos, and deciding who is in control*. Washington, DC: Data Quality Campaign. Retrieved February 3, 2010 from: [http://www.dataqualitycampaign.org/files/meetings-dqc\\_quarterly\\_issue\\_brief-072908.pdf](http://www.dataqualitycampaign.org/files/meetings-dqc_quarterly_issue_brief-072908.pdf)

Data Quality Campaign Summary:

“Building and deploying a longitudinal data system is not solely an information technology (IT) project. It is an agency wide endeavor that should involve stakeholders throughout the education system, which underscores the importance of developing a data governance strategy a consistent network of data infrastructure and business processes that address data ownership, accountability, quality, access and security. Although data governance includes creating a unified IT plan, coordinating the people and processes is equally important.”

Learning Point Associates (2006). *Effective use of electronic data systems: A readiness guide for district and school leaders*. Retrieved January 22, 2010 from: <http://www.learningpt.org/pdfs/datause/DataReadinessTool.pdf>

Learning Point Associates Summary:

“This guidebook offers tools and resources for district and school leaders who want to acquire and implement an electronic data system.”

Steiny, J., & Smith, N. (2007). *Reporting and analysis tools: Helping mine education data for information riches*. Washington, DC: Data Quality Campaign. Retrieved February 3, 2010 from: [http://www.dataqualitycampaign.org/files/Publications-Reporting\\_and\\_Analysis\\_Tools\\_Education\\_Data-090107.pdf](http://www.dataqualitycampaign.org/files/Publications-Reporting_and_Analysis_Tools_Education_Data-090107.pdf)

Data Quality Campaign Summary:

## 2. Implementing

“A policy brief demonstrating how to make data useful and accessible and outlining lessons learned from states implementing reporting and analysis tools.”

U.S. Department of Education, Office of Planning, Evaluation, and Policy Development.(2010). *Use of education data at the local level: From accountability to instructional improvement*, Washington, D.C. Retrieved January 12, 2010 from: <http://www2.ed.gov/rschstat/eval/tech/use-of-education-data/use-of-education-data.pdf>

USED Summary:

“The national Study of Education Data Systems and Decision Making examined both the implementation of student data systems and the broader set of practices involving the use of data to improve instruction, regardless of whether or not the data were accessed through an electronic system. Earlier study reports have documented a dramatic increase in the proportion of teachers with access to a student data system between 2005 and 2007 and described school practices with respect to data use and the challenges that are part of student data system implementation. This final report builds on the picture of local practices in implementing data-driven decision making provided in the earlier reports by presenting data from the national district survey as well as from site visits conducted during 2007–08 to 36 schools in 12 districts.

Key findings include:

- Data-driven decision making is an ongoing process rather than a one-time event centered on the acquisition of a data system. Districts will get more out of their investments in electronic data systems if they think about data-driven decision making as a system-wide innovation and develop a long-term strategy for its implementation as part of a continuous improvement process.
- To influence teachers' day-to-day instruction, data systems must provide teachers with information that is both timely and relevant to their instructional decisions. To be useful to teachers, systems need to provide data from recently given assessments that provide diagnostic information on students' learning needs.
- Human and organizational supports for data use are just as important as the technical quality of the data system. Professional development around data use is widespread, but only a small minority of districts and schools have made data use a regular part of teachers' practice.
- Districts can promote data-driven decision making in schools by providing time for teachers to meet with colleagues to discuss and use data, funding positions for instructional coaches who help teachers connect data to alternative instructional approaches,

## 2. Implementing

and by modeling data-driven decision making for continuous improvement in their own operations.

- Districts' greatest perceived area of need with respect to data-driven decision making is for models of how to connect student data to instructional practices. Among teachers, there is a need to enhance their assessment interpretation and data use skills.”

### 3. Utilizing

Allensworth, E., and Easton, J. (2005) *The On-Track Indicator as a predictor of high school graduation*. Retrieved January 22, 2010 from: <http://ccsr.uchicago.edu/publications/p78.pdf>

Consortium on Chicago School Research Summary:

“This indicator identifies students as on-track if they earn at least five full-year course credits and no more than one semester F in a core course in their first year of high school. On-track students are more than three and one-half times more likely to graduate from high school in four years than off-track students. The indicator is a more accurate predictor of graduation than students’ previous achievement test scores or their background characteristics.

Perhaps the most important finding from this report is that failures during the first year of high school make a student much less likely to graduate. Based on their findings, the authors believe that parents and teachers should carefully monitor students’ grades, especially in the first semester of freshman year, when there are still many opportunities to improve grades. Helping students make a successful transition to high school during the first semester could make students more likely to graduate.

This report also finds that on-track students are not necessarily the students with the highest achievement test scores. Many students with strong achievement fail to graduate, and many students who have demonstrated weaker achievement succeed in graduating.

Finally, this report concludes that the particular school a student attends plays a large role in whether the student is on-track. While we expect schools to have students with differing levels of preparation for high school, differences in the number of students on-track at each school remained even when the authors controlled for students’ eighth-grade test scores and socioeconomic status. This suggests that school climate and structure play a significant role in whether students succeed in high school. Schools can use the on-track indicator, which makes use of readily available data on course credits and failures, to understand what aspects of the school may be leading students to drop out.”

Data Quality Campaign. (2009, March). *The next step: Using longitudinal data systems to improve student success*. Retrieved February 2, 2010 from: <http://www.dataqualitycampaign.org/files/NextStep.pdf>

Data Quality Campaign Summary:

“...To help ensure that states benefit from their infrastructure investments, the DQC will focus on two high-priority needs: building

### 3. Utilizing

demand for the newly available information and helping state agencies assist all stakeholders in harnessing this powerful source of information.”

Dougherty, C. (2010). *Using the right data to determine if high school interventions are working to prepare students for college and careers*. Retrieved January 28, 2010 from: [http://www.betterhighschools.org/docs/NCEA\\_CollegeCareerReadiness.pdf](http://www.betterhighschools.org/docs/NCEA_CollegeCareerReadiness.pdf)

National High School Center Summary:

“This report is designed to guide educators in collecting and analyzing valuable student achievement data that can help them determine if and how high school interventions for underprepared students are working to effectively prepare them for college and careers. The report was authored by Chrys Dougherty, a senior research scientist at the National Center for Educational Achievement (NCEA), which is a partner of the National High School Center.”

Gazzerro, P., & Laird, E. (2008). *Linking spending and student achievement data: Managing inputs, processes and outcomes*. Washington, DC: Data Quality Campaign. Retrieved January 22, 2010 from: [http://www.dataqualitycampaign.org/files/meetings-dqc\\_quarterly\\_issue\\_brief-042408.pdf](http://www.dataqualitycampaign.org/files/meetings-dqc_quarterly_issue_brief-042408.pdf)

Data Quality Campaign Summary:

“With increasing pressure on state and local budgets, ensuring a maximum return on investment is more vital than ever for policymakers. Knowing which schools, programs and processes improve student achievement is vital for determining what works and allocating the investment needed for that success. States have made tremendous progress with building, maintaining and using their longitudinal data systems. However, most state and even district financial systems do not record expenditures in a way that can connect student outcomes with specific programs and processes.”

Gitomer, D.H., Andal, J., & Davison, D. (2005). *Using data to understand the academic performance of English language learners. Policy Issues*, 21, 1-16. Chicago, IL: Learning Point Associates. Retrieved January 25, 2010 from: <http://www.ncrel.org/policy/pubs/pdfs/pivol21.pdf>

Learning Point Associates Summary:

### 3. Utilizing

“Because of educational accountability demands, districts and states are required to collect and report certain kinds of information about English language learner (ELL) students. In general, these summaries report on the numbers of ELL students and how well they are performing on statewide measures of achievement—information that fulfills external accountability pressures.

This edition of *Policy Issues* has been developed to provide perspectives on how information that is already being collected can be analyzed and reported in ways that support the internal information needs of educational systems. Specifically, by using relatively straightforward approaches to analyzing their data, districts and states can better address and convey answers to the following:

- What are the background characteristics of the ELL students in the school, district, or state?
- Are background characteristics of ELL students related to how well they progress academically?
- Are particular aspects of the educational program, including how instruction is organized and characteristics of teachers, related to student outcomes? ”

Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). *Using student achievement data to support instructional decision making* (NCEE 2009-4067). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved February 3, 2010 from [http://ies.ed.gov/ncee/wwc/pdf/practiceguides/dddm\\_pg\\_092909.pdf](http://ies.ed.gov/ncee/wwc/pdf/practiceguides/dddm_pg_092909.pdf)

What Works Clearinghouse Summary:

“This guide offers five recommendations to help educators effectively use data to monitor students’ academic progress and evaluate instructional practices. The guide recommends that schools set a clear vision for schoolwide data use, develop a data-driven culture, and make data part of an ongoing cycle of instructional improvement. The guide also recommends teaching students how to use their own data to set learning goals.”

Knapp, M.S., Swinnerton, J.A., Copland, M.A., & Monpas-Huber, J. (2006). *Data-informed leadership in education*. Retrieved January 12, 2010 from: <http://depts.washington.edu/ctpmail/PDFs/DataInformed-Nov1.pdf>

Center for the Study of Teaching and Policy Summary:

### 3. Utilizing

“Drawing from empirical studies and the landscape of current practice, this report explores ideas related to how educational leaders access data, the meanings they give to it, and the uses to which they put these data in the varying settings in which leaders seek to improve teaching and learning. Moving away from the potentially appealing rhetoric that data can provide clear, indisputable direction for future action (e.g. ‘data-driven decision making’), the notion of data-informed leadership captures the complex and often ambiguous nature of data use in educational settings.”

Laird, E. (2006). *Data use drives school and district improvement*. Washington, DC: Data Quality Campaign. Retrieved February 2, 2010 from: [http://www.dataqualitycampaign.org/files/Meetings-DQC\\_Quarterly\\_Issue\\_Brief\\_092506.pdf](http://www.dataqualitycampaign.org/files/Meetings-DQC_Quarterly_Issue_Brief_092506.pdf)

Data Quality Campaign Summary:

“Although data can be used by school systems in myriad ways to promote systemwide success, this DQC brief focuses specifically on how stakeholders at all levels can support access to and use of a student s academic history to adjust instruction to meet the student s needs.”

LaPointe, M. A., Brett, J., Kagle, M., Midouhas, E., Sánchez, M. T., Oh, Y., & North, C. (2009). *How state education agencies in the Northeast and Islands Region support data-driven decision making in districts and schools* (Issues & Answers Report, REL 2009–No. 072). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast and Islands. Retrieved January 22, 2010 from: [http://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL\\_2009072.pdf](http://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL_2009072.pdf)

Institute of Education Sciences Abstract:

“The report examines the initiatives of state education agencies in the Northeast and Islands Region to support data-driven decision making in districts and schools and describes the service providers hired to support this work. The report identifies four components of data-driven decision making initiatives and finds that not all initiatives include all four.”

Learning Point Associates. (2009, December). *Connecting formative assessment research to practice: An introductory guide for educators*. Retrieved January 12, 2010 from: <http://www.learningpt.org/pdfs/FormativeAssessment.pdf>

### 3. Utilizing

Learning Point Associates Summary:

This guide is, “intended to enhance the knowledge and build the capacity of state, district, and school personnel to implement effective formative assessment practice.”

Learning Point Associates (2004). *Guide to using data in school improvement efforts: A compilation of knowledge from data retreats and data use at Learning Point Associates*. Retrieved January 22, 2010 from:  
<http://www.learningpt.org/pdfs/datause/guidebook.pdf>

Learning Point Associates Summary:

“This guide is designed for educators who are beginning to learn how to use data for school improvement.”

Pan, D., Smith-Hansen, L., Jones, D.H., Rudo, Z.H., Alexander, C., & Kahlert, R. (2004). *Investigation of education databases in four states to support policy research on resource allocation*. Retrieved January 12, 2010 from:  
<http://www.sedl.org/pubs/policyresearch/policydocs/IES-Policy.pdf>

SEDL Summary:

“In this report, SEDL researchers investigate data collected and managed by state education agencies to determine whether new research can be conducted to support policy questions about education resources and student performance. Increased attention on the resources needed to help students succeed, how these resources should be allocated, and whether spending and staffing strategies affect student performance bring to light the need to examine state data to inform these issues. This report contributes to education research and policy by

- describing in fine detail the data collected and housed by state education agencies in Arkansas, Louisiana, New Mexico, and Texas;
- providing guidance to policy audiences and researchers about the questions that can be answered with these data, with discussion about using specific financial, staff, student performance, and student characteristic variables from each study state; and

### 3. Utilizing

- discussing ways these data could be improved to expand the range of policy questions answered.”

U.S. Department of Education, Office of Planning, Evaluation and Policy Development. (2009). *Implementing data-informed decision making in schools: Teacher access, supports and use*, Washington, D.C. Retrieved January 12, 2010 from: <http://www2.ed.gov/rschstat/eval/tech/data-informed-decision/data-informed-decision.doc>

#### USED Summary:

This report “describes the student data systems available to school staff members, how school staff members are using the systems and other forms of student data, teachers' understanding of data displays and data interpretation issues, and the supports and challenges for school-level use of student data in planning and implementing instruction. This report draws on case study findings in nine purposively sampled districts, nominated on the basis of the strength of their data use activities. Researchers interviewed district staff members as well as principals and teachers from three schools within each district. In addition, a set of scenarios involving hypothetical student data were presented to teachers at each school to probe their understanding of student data. In addition to case study data, this report also draws on data from secondary sources (spring 2007 district and teacher surveys from the U.S. Department of Education's National Educational Technology Trends Study).

Key findings: Data from student data systems are being used in school improvement efforts but are having little effect on teachers' daily instructional decisions. Typically, the information needed for instructional decision making was spread across multiple systems without mechanisms for regular transport of information from one system to another. As a result, neither teachers nor administrators see a comprehensive record of students' educational experiences and performances that is both longitudinal and up to date. In addition, only a minority of data systems incorporate resources such as instructional materials, model lesson plans, and formative assessment results linked to frameworks and curriculum guides.”

U.S. Department of Education, Office of Planning, Evaluation and Policy Development. (2007). *Teachers' use of student data management systems to improve instruction*, Washington, D.C. Retrieved January 22, 2010 from: <http://www2.ed.gov/rschstat/eval/tech/teachers-data-use/teachers-data-use.pdf>

#### USED Summary:

### 3. Utilizing

This report “provides the first national estimates of the prevalence of K–12 teachers' access to and use of student data systems. This paper was developed through a secondary analysis of national survey data from over 6,000 teachers and over 1,000 district technology coordinators conducted in 2005 as part of the National Educational Technology Trends Study. Evaluation questions include: (1) How broadly are student data systems being implemented in districts and schools?, (2) Within these systems, how prevalent are tools for generating and acting on data?, and (3) How are school staff using student data systems?”

#### Methodology

- 1) Search queries utilized included: “Longitudinal Data Systems,” “State Data Systems,” “State Education Agency Data Systems,” “Local Data Systems,” “Data-Driven Instruction,” “Data-Drive Decision Making,” and “ARRA Assurance 2.” Logical variants (i.e. “LDS,” “SEA Data Systems,” etc.) were also used as search queries.
- 2) Academic OneFile, EBSCO, ERIC, Google Scholar, ProQuest, LexisNexis, and What Works Clearinghouse were used to search for relevant resources.
- 3) The resulting list of resources was sorted into three logical categories as noted above—Necessity, Implementing, and Utilizing.
- 4) Journal articles were retrieved using The University of North Carolina at Greensboro Walter Clinton Jackson Library online “Journal Finder” tools.



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